



CURRENT INDUSTRIAL REPORTS

Manufacturers' Shipments, Inventories, and Orders

March 1971

U.S. DEPARTMENT OF COMMERCE / Bureau of the Census



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New orders for manufactured products in March at \$57.9 billion decreased 0.7 percent or \$400 million from \$58.3 billion in February (revised upward from \$57.7 billion), after seasonal adjustment. New Orders excluding transportation equipment increased \$400 million to \$50.1 billion. Shipments increased \$500 million or 0.9 percent to \$58.3 billion from \$57.8 billion (revised) in February. Unfilled orders declined \$400 million to \$83.6 billion at the end of March. Manufacturers' inventories declined \$300 million to \$99.2 billion from \$99.5 billion at the end of February. The inventories to shipments ratio decreased to 1.70 from 1.72 in February.

For the three months ending with March, the average change in new orders represents an increase of 0.9 percent compared with an increase of 0.6 percent for the three months ending with December and a decrease of 0.1 percent for the three months ending with September.

NEW ORDERS

New orders for durable goods at \$31.5 billion decreased 1.1 percent or \$400 million from \$31.9 billion in February (revised upward from \$31.4 billion). New orders for transportation equipment declined \$800 million to \$7.8 billion as a large decline in the shipbuilding and railroad equipment group was partially offset by an increase in the aerospace industry. New orders for the machinery industries increased \$200 million to \$9.6 billion and for primary metals increased \$100 million to \$5.2 billion.

Among the supplementary series, new orders for defense products decreased \$700 million and for producers' capital goods decreased \$900 million, both influenced primarily by the decline in the shipbuilding component. New orders for household durables increased \$200 million to \$2.3 billion.

Chart 1 - Manufacturers' New Orders (Seasonally Adjusted)

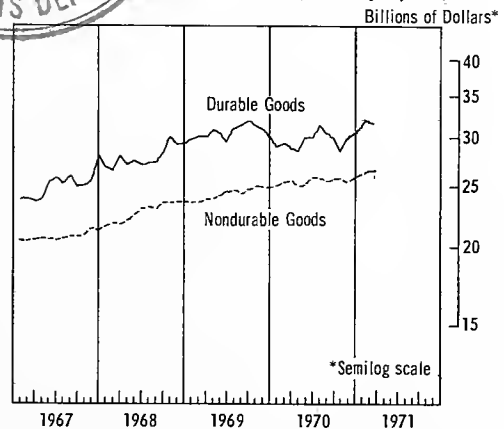
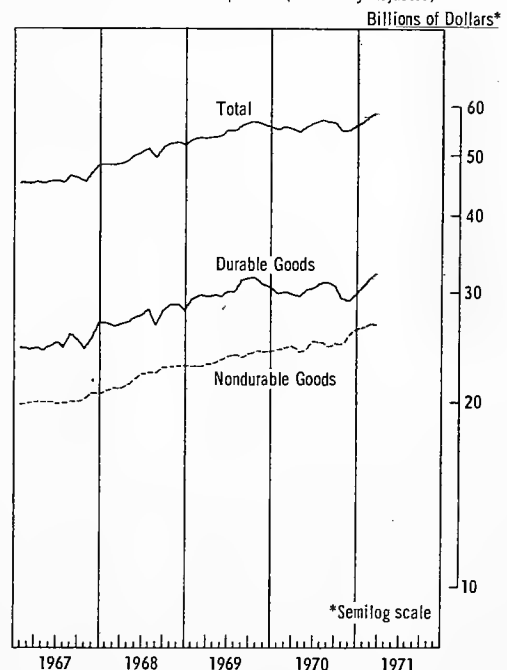


Chart 2 - Manufacturers' Shipments (Seasonally Adjusted)



SHIPMENTS

Shipments of durable goods increased \$600 million or 1.9 percent to \$32.0 billion in March from the February total of \$31.4 billion (revised upward from \$31.0 billion). Shipments of transportation equipment increased \$300 million to \$8.4 billion, with the rise being primarily in the aerospace industry. Shipments of the primary metals industries increased \$200 million to \$5.0 billion. Shipments of nondurable goods declined \$100 million to \$26.4 billion as increases in the food and textiles industries were more than offset by declines in the chemicals, petroleum, and other nondurable goods industries.

UNFILLED ORDERS

Unfilled orders for durable goods declined \$500 million to \$80.4 billion at the end of March. Unfilled orders for transportation equipment declined \$600 million to \$27.9 billion, primarily in the aerospace group. Unfilled orders for the primary metals industries increased \$100 million to \$8.0 billion.

INVENTORIES

Inventories in the nondurable goods industries declined \$300 million to \$33.9 billion while those in the durable goods industries remained virtually unchanged at \$65.3 billion. At the all manufacturing level, work in process inventories declined \$200 million and materials and supplies declined \$100 million while finished goods remained unchanged from February.

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The advance report is based on a tabulation of early reports and is limited to statistics on shipments, new orders, and unfilled orders for a few broad industries categories. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month. The advance report on durable goods for March is scheduled for release on May 21, 1971 and the full report is scheduled for release on June 2.

For an explanation of terms used in this report see appendix following table 5.

Inquiries concerning these figures should be addressed to the U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233.

Chart 3 - Manufacturers' Unfilled Orders (Seasonally Adjusted)

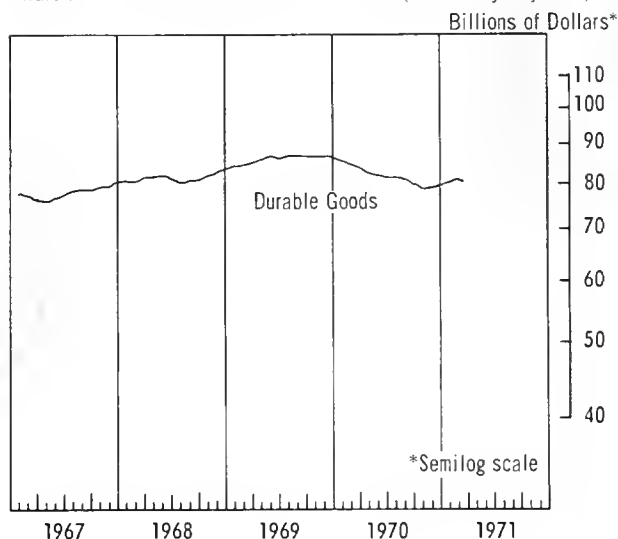


Chart 4 - Total Inventory (Seasonally Adjusted)

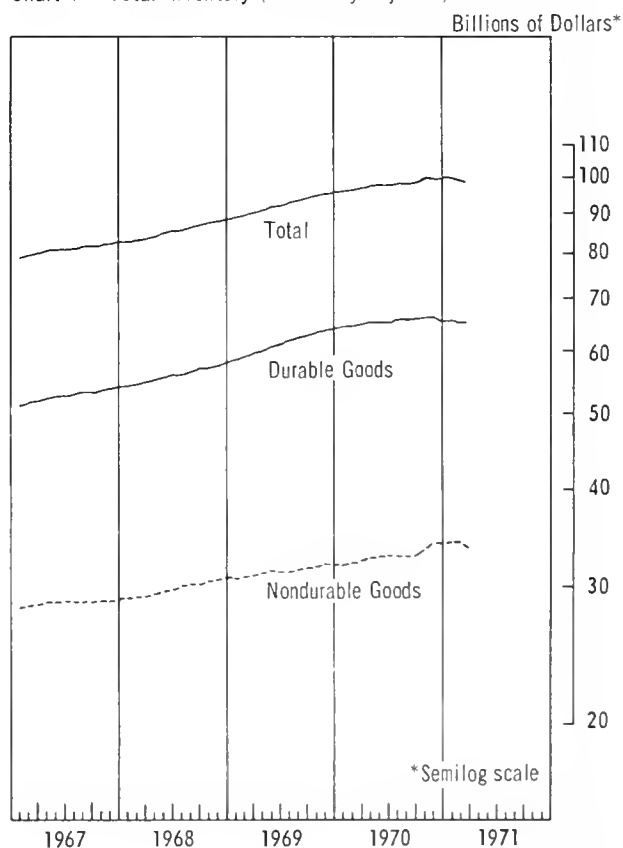


Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment		
	Mar. 1971 ^p	Feb. 1971 ^r	Jan. 1971	Mar. 1971 ^p	Feb. 1971 ^r	Mar. 1970	Mar. 1971 ^p	Feb. 1971 ^r	Jan. 1971	Mar. 1971 ^p	Feb. 1971 ^r	Mar. 1970
	Shipments						Total inventories					
All manufacturing industries:												
Total.....	58,317	57,803	56,504	60,472	58,523	57,173	99,210	99,520	99,801	99,740	100,075	97,504
Total, excluding transportation.....	49,930	49,695	49,180	51,472	50,109	49,543	84,588	84,828	84,888	85,024	85,272	81,890
Durable goods industries, total.....	31,958	31,352	30,545	33,649	31,946	31,248	65,311	65,347	65,610	65,664	65,643	64,599
Stone, clay, and glass products.....	1,649	1,614	1,613	1,605	1,471	1,464	2,648	2,653	2,663	2,743	2,720	2,627
Primary metals, total.....	5,042	4,805	4,746	5,375	5,022	4,994	9,200	9,210	9,159	9,186	9,277	8,244
Blast furnaces, steel mills.....	2,352	2,308	2,253	2,573	2,394	2,229	4,987	4,958	4,939	4,942	5,022	4,319
All other primary metals.....	2,690	2,497	2,493	2,802	2,628	2,765	4,213	4,252	4,220	4,244	4,255	3,925
Fabricated metal products, total.....	3,188	3,189	3,230	3,247	3,182	3,246	7,021	6,969	6,990	7,026	6,929	6,747
Metal cans, barrels, and drums.....	255	356	383	250	321	289	758	768	838	741	741	791
Machinery, except electrical, total.....	5,577	5,507	5,603	6,020	5,717	5,844	13,963	14,011	14,013	14,104	14,147	13,580
Engines and turbines.....	564	430	520	648	424	549	980	1,005	996	983	1,018	952
Farm machinery and equipment.....	491	504	473	602	557	552	997	989	995	1,042	1,042	1,016
Construction, mining, and material handling equipment.....	759	791	809	784	802	749	2,488	2,456	2,456	2,541	2,505	2,336
Metalworking machinery.....	331	320	333	362	336	357	1,091	1,079	1,090	1,085	1,082	1,159
General industrial machinery.....	494	533	541	524	552	555	1,170	1,172	1,162	1,180	1,177	1,155
Electrical machinery, total.....	3,993	4,017	3,989	4,153	4,072	3,870	9,518	9,431	9,468	9,507	9,373	9,528
Electrical transmission and distribution equipment and industrial apparatus.....	797	813	777	837	828	772	2,133	2,118	2,110	2,138	2,123	1,988
Household appliances, including radio and TV.....	853	792	781	868	792	779	2,064	1,980	1,994	2,039	1,961	2,089
Communication equipment.....	1,118	1,181	1,253	1,175	1,203	1,100	2,730	2,730	2,753	2,744	2,708	2,843
Transportation equipment, total.....	8,387	8,108	7,324	9,000	8,414	7,630	14,622	14,692	14,913	14,716	14,803	15,614
Motor vehicles and parts.....	4,812	4,762	4,203	5,276	4,991	3,898	4,087	4,080	4,105	4,099	4,166	4,140
Aircraft, missiles, and parts.....	2,874	2,615	2,436	2,979	2,685	3,055	8,374	8,512	8,619	8,413	8,495	9,489
Instruments and related products.....	1,073	1,115	1,115	1,090	1,087	1,223	2,628	2,621	2,648	2,628	2,610	2,582
All other durable goods industries.....	3,049	2,997	2,925	3,159	2,981	2,977	5,711	5,760	5,756	5,754	5,784	5,677
Nondurable goods industries, total.....	26,359	26,451	25,959	26,823	26,577	25,925	33,899	34,173	34,191	34,076	34,432	32,905
Food and kindred products, total.....	9,104	8,960	8,787	9,063	8,926	8,717	7,738	7,857	7,863	7,631	7,868	7,382
Meat products.....	1,631	1,669	1,683	1,609	1,627	1,785	789	787	783	816	817	864
Tobacco products.....	479	471	483	463	448	430	2,179	2,239	2,187	2,284	2,364	2,263
Textile mill products.....	1,972	1,919	1,910	2,013	1,890	1,862	3,275	3,262	3,245	3,344	3,318	3,496
Paper and allied products, total.....	2,454	2,453	2,433	2,532	2,479	2,430	2,766	2,791	2,821	2,772	2,778	2,691
Pulp, paper, etc.....	1,102	1,098	1,101	1,146	1,118	1,066	1,099	1,108	1,116	1,104	1,112	1,053
Chemicals and allied products, total.....	4,204	4,372	4,128	4,351	4,371	4,392	7,167	7,173	7,147	7,284	7,310	6,756
Industrial chemicals, except pigments.....	1,444	1,486	1,461	1,505	1,508	1,472	2,242	2,284	2,302	2,294	2,341	2,221
Petroleum and coal products.....	2,263	2,317	2,320	2,222	2,317	2,085	2,444	2,490	2,529	2,425	2,445	2,327
Rubber and plastics products, n.e.c.....	1,534	1,531	1,474	1,599	1,544	1,618	1,953	1,940	1,940	1,979	1,971	1,987
All other nondurable goods industries.....	4,349	4,428	4,424	4,580	4,602	4,391	6,377	6,421	6,459	6,357	6,378	6,003
	New orders						Unfilled orders					
All manufacturing industries:												
Total.....	57,892	58,288	57,377	60,191	59,630	56,352	83,568	83,994	83,511	84,259	84,540	86,944
Total, excluding transportation.....	50,121	49,689	49,505	51,780	50,883	49,203	55,712	55,523	55,530	56,603	56,295	56,642
Durable goods industries, total.....	31,504	31,867	31,405	33,347	33,027	30,412	80,386	80,843	80,330	81,090	81,394	83,991
Primary metals, total.....	5,178	5,100	5,428	5,614	5,865	4,874	8,031	7,894	7,597	8,979	8,742	7,318
Blast furnaces, steel mills.....	2,431	2,543	2,906	2,780	3,077	2,200	4,818	4,739	4,504	5,637	5,431	3,552
Fabricated metal products.....	3,113	3,075	2,916	3,199	3,081	3,322	10,583	10,661	10,774	10,678	10,726	10,525
Machinery, except electrical, total.....	5,671	5,462	5,419	6,139	5,724	5,601	15,704	15,610	15,656	15,749	15,629	16,825
Engines and turbines.....	827	438	555	898	416	445	5,034	4,770	4,762	5,003	4,753	4,840
Construction, mining, and material handling equipment.....	751	757	726	810	808	799	2,112	2,120	2,155	2,163	2,137	2,248
Metalworking machinery.....	280	281	316	311	301	259	1,081	1,131	1,170	1,072	1,122	1,582
General industrial machinery.....	527	564	450	553	597	536	1,622	1,590	1,559	1,630	1,602	1,659
Electrical machinery, total.....	3,927	3,958	3,985	4,038	4,042	3,822	13,018	13,084	13,144	12,837	12,953	13,473
Electrical transmission and distribution equipment and industrial apparatus.....	794	753	766	811	826	762	3,257	3,259	3,320	3,220	3,246	3,571
Household appliances, including radio and TV.....	878	802	732	859	811	806	552	527	518	512	521	574
Communication equipment.....	1,027	1,233	1,251	1,085	1,181	1,029	5,631	5,723	5,671	5,536	5,626	5,463
Transportation equipment, total.....	7,771	8,599	7,872	8,411	8,747	7,149	27,856	28,471	27,981	27,656	28,245	30,302
Aircraft, missiles, and parts.....	2,398	2,138	2,466	2,530	2,249	2,834	19,383	19,859	20,336	19,368	19,818	23,240
All other durable goods industries.....	5,844	5,673	5,785	5,946	5,568	5,644	5,194	5,123	5,178	5,191	5,099	5,548
Nondurable goods industries, total.....	26,388	26,421	25,972	26,844	26,603	25,940	3,182	3,151	3,181	3,169	3,146	2,953
Industries with unfilled orders.....	7,274	7,175	7,154	7,412	7,247	7,047	3,182	3,151	3,181	3,169	3,146	2,953
Industries without unfilled orders.....	19,114	19,246	18,818	19,432	19,356	18,893	-	-	-	-	-	-

- Represents zero. ^p Preliminary. ^r Revised.
¹ Adjusted for trading-day and calendar-month variations.

Table 2.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, FOR MARKET CATEGORIES AND SUPPLEMENTARY SERIES
(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment		
	Mar. 1971 ^P	Feb. 1971 ^r	Jan. 1971	Mar. 1971 ^P	Feb. 1971 ^r	Mar. 1970	Mar. 1971 ^P	Feb. 1971 ^r	Jan. 1971	Mar. 1971 ^P	Feb. 1971 ^r	Mar. 1970
	Shipments						Total inventories					
All manufacturing industries, total..	58,317	57,803	56,504	60,472	58,523	57,173	99,210	99,520	99,801	99,740	100,075	97,504
Durable goods industries, total.....	31,958	31,352	30,545	33,649	31,946	31,248	65,311	65,347	65,610	65,664	65,643	64,599
Nondurable goods industries, total.....	26,359	26,451	25,959	26,823	26,577	25,925	33,899	34,173	34,191	34,076	34,432	32,905
Industry groups arranged by market categories:												
Home goods and apparel.....	4,887	4,805	4,809	5,176	4,997	4,725	10,042	10,044	10,065	10,043	10,013	9,836
Consumer staples.....	11,526	11,432	11,162	11,498	11,342	11,113	12,841	12,994	12,947	12,827	13,018	12,429
Equipment and defense products, except automotive.....	9,411	9,218	9,148	9,983	9,422	9,727	25,967	26,086	26,268	26,187	26,171	26,213
Automotive equipment.....	5,382	5,331	4,764	5,857	5,536	4,548	5,188	5,224	5,274	5,337	5,337	5,343
Construction materials, supplies, and intermediate products.....	4,878	4,818	4,762	4,855	4,523	4,417	8,373	8,355	8,328	8,532	8,447	8,159
Other materials and supplies and intermediate products.....	22,233	22,199	21,859	23,103	22,703	22,643	36,799	36,853	36,969	36,877	36,999	35,519
Supplementary series: ²												
Household durable goods industries.....	2,246	2,124	2,104	2,319	2,160	2,116	5,094	5,052	5,061	5,091	5,049	5,152
Producers' capital goods industries.....	6,672	6,700	6,672	7,085	6,868	6,762	17,614	17,598	17,652	17,717	17,673	16,811
Defense products industries (old series).	4,240	4,048	3,961	4,417	4,141	4,471	11,837	11,998	12,129	11,902	11,966	13,086
Defense products (new series)*.....	1,903	1,898	1,913	1,987	1,942	2,027	6,017	6,020	6,189	6,050	6,009	7,366
	New orders						Unfilled orders					
All manufacturing industries, total..	57,892	58,288	57,377	60,191	59,630	56,352	83,568	83,994	83,511	84,259	84,540	86,944
Durable goods industries, total.....	31,504	31,867	31,405	33,347	33,027	30,412	80,386	80,843	80,330	81,090	81,394	83,991
Nondurable goods industries, total.....	26,388	26,421	25,972	26,844	26,603	25,940	3,182	3,151	3,181	3,169	3,146	2,953
Industry groups arranged by market categories:												
Home goods and apparel.....	4,914	4,799	4,804	5,159	5,011	4,732	1,909	1,870	1,874	1,840	1,854	1,932
Consumer staples.....	11,538	11,436	11,159	11,500	11,353	11,105						
Equipment and defense products, except automotive.....	8,937	9,850	9,742	9,591	9,899	9,174	45,584	46,069	45,418	45,256	45,692	47,173
Automotive equipment.....	5,372	5,353	4,782	5,813	5,537	4,416						
Construction materials, supplies, and intermediate products.....	4,833	4,685	4,420	4,884	4,464	4,504	10,508	10,555	10,687	10,837	10,609	10,574
Other materials and supplies and intermediate products.....	22,298	22,165	22,472	23,244	23,366	22,421	25,567	25,500	25,532	26,526	26,385	27,265
Supplementary series: ²												
Household durable goods industries.....	2,268	2,113	2,107	2,296	2,174	2,124	1,531	1,509	1,522	1,474	1,496	1,578
Producers' capital goods industries.....	6,644	7,518	6,990	7,085	7,630	6,406	25,065	25,093	24,277	24,858	24,858	24,738
Defense products industries (old series).	3,669	3,618	3,988	3,868	3,674	4,186	25,466	26,039	26,469	25,349	25,899	29,200
Defense products (new series)*.....	1,653	2,357	2,170	1,756	2,281	1,670	19,977	20,227	19,769	19,795	20,025	19,819

*During 1968 manufacturers in ordnance, communications, aircraft and aircraft parts, and shipbuilding industries began to provide aggregate figures on shipments, orders, and total inventories of work performed for the Department of Defense. The results of these reports are included in these new defense series. Since there are no historical data available to develop separate seasonal factors for these reporters, the data have been seasonally adjusted using the factors of these industries. ^PPreliminary. ^rRevised. ¹Shipments and new orders adjusted for trading-day and calendar-month variations; unfilled orders and inventories as of end of month. The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries - Household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; ophthalmic goods, watches, and clocks; and miscellaneous personal goods.

Producers' capital goods (formerly machinery and equipment) industries - Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding household appliances, communication equipment and electronic components), shipbuilding and repairing, and railroad and street car equipment.

Defense products industries (old series) - Based on reports for companies classified in the communication equipment, complete aircraft, aircraft parts, and ordnance industries. (Thus, this series includes significant amounts of nondefense work in these industries and omits defense work performed in the shipbuilding industry.)

Defense products (new series) - Based on separate reports on defense work filed by large defense contractors in the following industries: ordnance, communications, complete aircraft, aircraft parts, and shipbuilding. Thus, it differs from the old series in that it includes defense activity in shipbuilding and excludes nondefense work in ordnance, communications, complete aircraft, and aircraft parts. The data are comparable to those published annually in the MA-175, Shipments of Defense-Oriented Industries, for the specified industries.

Table 3.--MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS MONTH-TO-MONTH AND LONG TERM PERCENT CHANGES

(Based on seasonally adjusted data)

Item and industry group	Month-to-month			Average monthly rates of change				Average, 1965-1970	
	Feb.- Mar. 1971	Jan.- Feb. 1971	Dec. 1970- Jan. 1971	3 months			12 months Mar. 1970- Mar. 1971	Average rise	Average decline
				Dec. 1970- Mar. 1971	Sept.- Dec. 1970	June- Sept. 1970			
Shipments:									
All manufacturing industries.....	+0.9	+2.3	+1.2	+1.5	-0.4	0.0	+0.5	+1.3	-1.1
Durable goods industries, total.....	+1.9	+2.6	+1.7	+2.1	-0.8	+0.3	+0.6	+2.0	-1.7
Nondurable goods industries, total.....	-0.3	+1.9	+0.6	+0.7	+0.3	-0.2	+0.3	+1.0	-0.6
Total inventories:									
All manufacturing industries.....	-0.3	-0.3	+0.2	-0.1	+0.3	+0.3	+0.2	+0.7	-0.3
New orders:									
All manufacturing industries.....	-0.7	+1.6	+1.7	+0.9	+0.6	-0.1	+0.6	+1.9	-1.3
Durable goods industries, total.....	-1.1	+1.5	+2.6	+1.0	+0.9	-0.1	+0.8	+3.1	-2.3
Nondurable goods industries, total.....	-0.1	+1.7	+0.6	+0.7	+0.2	-0.1	+0.3	+1.0	-0.7
Unfilled orders:									
Durable goods industries, total.....	-0.6	+0.6	+1.1	+0.4	-0.1	-0.7	-0.3	+1.1	-0.7

Table 4.--RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP

(Based on seasonally adjusted data)

Industry group	Inventories - shipments ratio				Unfilled orders - shipments ratio ¹ (months' backlog)			
	Mar. 1971 ^P	Feb. 1971 ^R	Jan. 1971	Mar. 1970	Mar. 1971 ^P	Feb. 1971 ^R	Jan. 1971	Mar. 1970
All manufacturing industries, total.....	1.70	1.72	1.77	1.76	2.35	2.47	2.43	2.55
Durable goods industries, total.....	2.04	2.08	2.15	2.16	2.83	3.02	2.95	3.08
Stone, clay, and glass products.....	1.61	1.64	1.65	1.69	(NA)	(NA)	(NA)	(NA)
Primary metals.....	1.82	1.92	1.93	1.76	1.59	1.64	1.60	1.42
Fabricated metals.....	2.20	2.19	2.16	2.12	3.61	3.76	3.78	3.61
Machinery, except electrical.....	2.50	2.54	2.50	2.48	2.82	2.83	2.79	3.09
Electrical machinery.....	2.38	2.35	2.37	2.57	3.26	3.26	3.30	3.67
Transportation equipment.....	1.75	1.81	2.04	2.17	5.26	5.73	5.99	6.06
Instruments and related products.....	2.45	2.35	2.37	2.14	(NA)	(NA)	(NA)	(NA)
Nondurable goods industries, total.....	1.29	1.29	1.32	1.28	0.44	0.44	0.45	0.43
Food and kindred products.....	0.85	0.88	0.89	0.85	(X)	(X)	(X)	(X)
Tobacco products.....	4.55	4.75	4.53	4.86	(X)	(X)	(X)	(X)
Textile mill products.....	1.66	1.70	1.70	1.88	(NA)	(NA)	(NA)	(NA)
Paper and allied products.....	1.13	1.14	1.16	1.14	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products.....	1.70	1.64	1.73	1.56	(X)	(X)	(X)	(X)
Petroleum and coal products.....	1.08	1.07	1.09	1.10	(X)	(X)	(X)	(X)
Rubber and plastics products, n.e.c.....	1.27	1.27	1.32	1.26	(X)	(X)	(X)	(X)

(NA) Not available. ^PPreliminary. ^RRevised. (X) Not applicable.¹Excludes the following industries with no unfilled orders: Wooden containers; glass coolers; metal cans, barrels and drums; motor vehicle assembly operations; foods and related products; tobacco; apparel and related products; chemicals; petroleum and coal products; and rubber and plastics products, n.e.c.

Table 5.--VALUE OF MANUFACTURERS' INVENTORIES, BY STAGE OF FABRICATION, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment			Seasonally adjusted			Without seasonal adjustment		
	Mar. 1971 ^P	Feb. 1971 ^r	Jan. 1971	Mar. 1971 ^P	Feb. 1971 ^r	Mar. 1970	Mar. 1971 ^P	Feb. 1971 ^r	Jan. 1971	Mar. 1971 ^P	Feb. 1971 ^r	Mar. 1970
	Total						Materials and supplies					
All manufacturing industries, total..	99,210	99,520	99,801	99,740	100,075	97,504	30,085	30,188	30,262	29,991	30,151	29,551
Durable goods industries, total.....	65,311	65,347	65,610	65,664	65,643	64,599	17,921	17,877	17,954	17,670	17,682	17,457
Stone, clay, and glass products.....	2,648	2,653	2,663	2,743	2,720	2,627	844	844	854	847	843	821
Primary metals.....	9,200	9,210	9,159	9,186	9,277	8,244	3,213	3,230	3,219	3,035	3,131	2,851
Machinery (electrical and nonelectrical).	23,481	23,442	23,481	23,611	23,520	23,108	5,802	5,774	5,744	5,766	5,706	5,499
Transportation equipment.....	14,622	14,692	14,913	14,716	14,803	15,614	3,015	3,045	3,121	3,036	3,082	3,170
All other durable goods industries.....	15,360	15,350	15,394	15,408	15,323	15,006	5,047	4,984	5,016	4,986	4,920	5,116
Nondurable goods industries, total.....	33,899	34,173	34,191	34,076	34,432	32,905	12,164	12,311	12,308	12,321	12,469	12,094
Chemicals and allied products.....	7,167	7,173	7,147	7,284	7,310	6,756	2,394	2,378	2,364	2,393	2,381	2,289
Petroleum and coal products.....	2,444	2,490	2,529	2,425	2,445	2,327	547	593	609	555	574	529
Rubber and plastics products, n.e.c.....	1,953	1,940	1,940	1,979	1,971	1,987	629	622	620	606	610	587
All other nondurable goods industries....	22,335	22,570	22,575	22,388	22,706	26,489	8,594	8,718	8,715	8,767	8,904	8,689
	Work in process						Finished goods					
All manufacturing industries, total..	34,473	34,696	35,038	34,705	34,866	35,255	34,652	34,636	34,501	35,044	35,058	32,698
Durable goods industries, total.....	29,546	29,747	30,076	29,808	29,924	30,325	17,844	17,723	17,580	18,186	18,037	16,817
Stone, clay, and glass products.....	381	392	400	414	408	422	1,423	1,417	1,409	1,482	1,469	1,384
Primary metals.....	3,025	3,094	3,128	3,078	3,154	2,816	2,962	2,886	2,812	3,073	2,992	2,577
Machinery (electrical and nonelectrical).	10,628	10,655	10,732	10,723	10,754	10,965	7,051	7,013	7,005	7,122	7,060	6,644
Transportation equipment.....	10,155	10,163	10,310	10,205	10,183	10,878	1,452	1,484	1,482	1,475	1,538	1,566
All other durable goods industries.....	5,357	5,443	5,506	5,388	5,425	5,244	4,956	4,923	4,872	5,034	4,978	4,646
Nondurable goods industries, total.....	4,927	4,949	4,962	4,897	4,942	4,930	16,808	16,913	16,921	16,858	17,021	15,881
Chemicals and allied products.....	952	938	881	955	947	884	3,821	3,857	3,902	3,936	3,982	3,583
Petroleum and coal products.....	491	514	529	488	509	541	1,406	1,383	1,391	1,382	1,362	1,257
Rubber and plastics products, n.e.c.....	326	311	306	321	309	318	998	1,007	1,014	1,052	1,052	1,082
All other nondurable goods industries....	3,158	3,186	3,246	3,133	3,177	3,187	10,583	10,666	10,614	10,488	10,625	9,959

^PPreliminary.^rRevised.

Appendix

The following is a description of the survey and definitions used. These are provided to clarify the meaning of the items involved and do not represent any revisions from those definitions previously employed.

DESCRIPTION OF THE SURVEY

The Manufacturers' Shipments, Inventories, and Orders survey provides monthly figures that are comparable to the annual totals published each year in the annual survey of manufactures (ASM). The ASM is based on a sample of approximately 60,000 manufacturing establishments drawn from the 5-year census universe of about 310,000 establishments. In the ASM, each manufacturing establishment provides data on employment, payrolls, shipments, cost of materials, capital expenditures, and inventories as well as other selected items. The establishments do not provide information on unfilled orders or new orders. Since the ASM is establishment based, it provides data for each of the 425 manufacturing industries in the Standard Industrial Classification System (SIC) and area data for industry groups.

The monthly survey M3-1 does not provide information at the complete SIC industry detail because of the smaller size of the reporting panel and the fact that most companies cannot provide shipments, inventories, and orders data monthly for individual establishments.

The monthly reporting panel consists of approximately 5,000 reporting units and includes virtually all companies with 1,000 or more employees and a sample of the smaller ones. The reporting unit typically comprises the entire operations of a company although many of the larger diversified companies file separate divisional type reports for their operations in different industries.

Most of the reporting units include mixed industry activity even within the broad industry categories of the monthly survey. The survey methodology assumes that the month-to-month changes of the reporting units classified in each industry category represent effectively the month-to-month movements of the establishments in the SIC industries which make up the category. Thus, the monthly reports are used to update the ASM estimates by using a link relative of matched companies in each industry.

EXPLANATION OF TERMS

Value of Shipments--Shipments in the monthly survey are equivalent to value of shipments as reported in the ASM which are received or receivable net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments are the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts of establishments in the industry for contract work performed for others, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the aircraft industry and shipbuilding, the value of work done in a given year varies considerably from the value of shipments because of the long lead time between the input of the materials and labor and the shipments of the completed aircraft or ship. In the annual survey, therefore, the value of work done during the year is requested rather than the value of shipments.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. With the exception of motor vehicles, it is not significant at the 4-digit SIC group level. Since the M3-1 industry categories typically are groupings of industries, this duplication is significant for the all manufacturing, durable goods and nondurable goods categories and the various market groups. The significance of the duplication within the specific M3-1 industry groups varies depending on the 4-digit industry composition of these groups. It is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

Since most monthly reports are for the entire company or major divisions rather than establishments, the companies are requested to report net sales, i.e., total company billings after discounts and allowances. Companies which file divisional reports are requested to treat transfers from one division of the company to another as if they were net sales to outside customers. Although this

definition of shipments in the monthly reports differs from that used in the annual establishment reports, it is assumed that the month-to-month changes in company sales in the industry are representative of the month-to-month shipments of the establishments in the industry.

Inventories--End-of-month inventories in the monthly survey are identical in definition to the end-of-year inventories in the ASM. In the ASM, respondents are asked to report inventories of individual establishments at approximate current cost if feasible; otherwise, "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the aggregate inventories for establishments in an industry is not precise. The figures on the change in inventories from one period to the next are of greater significance than the actual aggregates.

Inventories are reported by stage of fabrication; (a) finished goods; (b) work in process; and (c) materials, supplies, fuel, and other inventories. In using inventories by stage of fabrication at the all manufacturing and 2-digit industry levels as well as for the durable and non-durable goods sectors, it should be noted that a finished product of one industry may be a raw material for another industry at the next stage of fabrication. Insofar as the durable and nondurable goods sectors and also the 2-digit industry groups contain industries with successive stages of processing, the same type of commodity may be included under different inventory categories in the aggregate statistics.

New Orders Received and Unfilled Orders--

Orders as reported in the monthly survey are net of cancellations during the month. They include orders received during the period and also filled during the period as well as those orders received for future delivery. They also include the net sales value of contract change documents which increase or decrease the sales value of the unfilled orders to which they relate. Orders include only those supported by binding legal documents such as signed contracts, or letter contracts. In case of letter contracts the full amount of the sales value is included if the parties are in substantial agreement on the amount; otherwise, only the funds specifically authorized to be expended are included. The respondent is instructed to deduct the sales value of partial or complete cancellation of existing orders.

Unfilled orders include orders as defined above that have not yet passed through the sales account. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the beginning of the period plus net new orders received less net sales.

While both new orders and unfilled orders are used in reviewing individual company reports for consistency, only unfilled orders are estimated directly in the tabulated totals. New orders are derived from the shipments plus net change in unfilled orders for each industry category. This procedure is followed for seasonally adjusted data as well as for the unadjusted data. Shipments and unfilled orders are seasonally adjusted independently. Seasonally adjusted new orders are derived from seasonally adjusted shipments and seasonally adjusted unfilled orders.